HONORING THE ROCKY MOUNTAIN INSTITUTE

HON. MARK UDALL

OF COLORADO

IN THE HOUSE OF REPRESENTATIVES Thursday, November 15, 2001

Mr. UDALL of Colorado. Mr. Speaker, I rise today to acknowledge the important energy and environmental research and achievements of the Rocky Mountain Institute (RMI), located in Snowmass, Colorado.

Over the last two decades, RMI has compiled an outstanding record of achievement—and it is poised to make even greater contributions now, as we address the interrelated problems and opportunities of energy policy, environmental protection and national security.

Resource analysts Hunter and Amory Lovins, who still lead it, established the RMI in 1982. It began as a small group of colleagues focusing on energy policy, and has grown into a broadbased institution with more than 45 full-time staff, an annual budget of nearly \$7 million, and a global reach.

RMI focuses on a wide range of pressing and important issues—such as energy efficiency, resource productivity, market-oriented solutions to resource problems, and unlocking the positive power of corporate structures. But its principal focus is on what it calls a "whole-systems approach." Instead of viewing resource problems as merely symptoms (reduced supplies) or as discrete, isolated components (oil, gas, water, etc.), RMI looks at the root causes of scarcity (wasteful, counterproductive activities) and devises cost-effective, profit-generating responses that result in greater efficiencies, fewer environmental impacts, and greater economic and national security.

In short, RMI and its team of researchers ask more probing questions that in turn lead to the creation of exciting new techniques for more profitable and sustainable living, while also increasing awareness and understanding of the impacts of bad habits and practices.

The creation of RMI came in response to a well-remembered energy crisis—the oil embargo of 1973—a time of challenges in some ways similar to those we face today. At that time of high gas prices, long lines at the gas station and a war in the Middle East, most of the country was focused on how we could become more energy independent by increasing our traditional energy supplies.

Amory Lovins was also thinking about this problem, but he came at it from a different perspective. Instead of trying to find solutions to feed our existing consumption, he was asking more bedrock questions, such as-What are the activities for which we need energy? Can we Find other energy sources to supply these needs? What are the cheapest ways to supply that energy? From this thinking arose a whole new era of looking at energy issues from the end-use/least-cost approach—the core focus of RMI. Since then, Amory and his team of researchers, which includes his wife Hunter Lovins, have examined the whole range of energy consumption, supply and delivery systems and considered ways to achieve the same social goals at lower costs and lower environmental impact.

They have been the leaders in promoting the more effective use of buildings (over 30 percent of America's total energy usage is tied to buildings; as RMI notes, weatherizing homes, using energy-efficient appliances and harnessing the natural heating and cooling effects of the sun and earth can lead to dramatic reductions while also resulting in increased productivity and enhanced living environments). They have been leaders in the promotion of high-efficiency light-bulbs (about 20 percent of our electricity generation goes for lighting; as RMI notes, if the country fully utilized the now commercially available efficient light bulbs, we could displace 120 Chernobyl-sized power plants).

And, they have been leaders in the development of new transportation technologies to reduce oil consumption (transportation needs comprise nearly two-thirds of our oil consumption, and RMI notes that if we increased the average fuel efficiency of vehicles by just 10 miles per gallon from today's current 19 mpg, we could displace all of the oil we import from the Persian Gulf).

Also in the transportation arena, RMI researchers introduced the Hypercar concept in 1992. This car was built using the same bedrock, whole-systems thinking used in all of RMI's work—they imagined what a car could be if designed from scratch. Not losing sight of consumer needs and the demands placed on cars, they produced a car composed of sturdy and light components that is aerodynamic and uses a combination of gas and electricity. This past spring, RMI unveiled the "Revolution"—an actual working prototype employing Hypercar concepts.

The Hypercar, like all of RMI's other work, is not based on science-fiction, or environmentally utopian precepts. RMI's work is based on real world, practical techniques that are available today. In fact, as can be attested to by the many companies that RMI consults for, the whole-system approach can result in tangible benefits that increase productivity and, ultimately, profits.

But perhaps RMI's most important contribution that has particular importance for today's world has been to highlight the connection between energy use and national security.

In their probing, and, unfortunately, prescient 1982 book "Brittle Power: Energy Strategy for National Security," Amory and Hunter Lovins made a convincing case that our reliance on centralized, concentrated distributed power systems is inherently insecure. Potential terrorists can take advantage of this system by targeting power grids, pipelines and production facilities to cause major power and energy disruptions. The authors then argued that a more secure energy system is one that is dispersed, diverse and involves more locally produced energy—in addition to the simple technique of reducing consumption altogether. Given the events of September 11th, we would be well advised to reengage in these issues and begin to seriously consider the recommendations outlined in this book.

As the work of RMI continually points out, enhancing our national security, does not only involve a reexamination of our energy infrastructure, consumption and resource supplies. It also involves creating strong and healthy communities.

As Amory and Hunter Lovins note, "Security also derives from a society in which people are healthy and have a healthful environment, a sustainable economy, a legitimate system of government, and abundant cultural and spiritual assets." This again involves looking at

the problem from a whole-system approach. An example the authors use to underscore this point is the costs of maintaining our military forces to keep oil flowing from the Middle East oil fields. They note that if we simply weatherize our homes, businesses and office complexes and increase gas mileage of our cars, we could eliminate U.S. oil imports from all sources. Again, it is this kind of thinking that we need now to address our security needs.

These are but a few examples of the critically important work of the RMI-and RMI not only produces abstract analyses, but it also puts its ideas into practice. A prime example is the RMI office building in Snowmass, Colorado. The 4,000-square-foot building is passive-solar, super-insulated, and earth-sheltered. It has no heating system in the traditional sense, but is kept comfortable even at 20 degrees below zero by passive solar gain through super-insulated windows. Savings of 99 percent in space-and water-heating energy and 90 percent in household electricity repaid the costs in building this facility in 10 months. RMI can even grow bananas in its greenhouse—in the high mountains of Colorado. More importantly, the RMI building demonstrates to homeowners that this level of efficiency is possible and cost effective.

This work—and much more—now has spanned the past twenty years. It has been highly praised and recognized with a number of awards, including the Right Livelihood Award (the "alternative Nobel Prize") in 1984, the Onassis Foundation's fist Delphi Prize (one of the world's top two environmental awards) in 1989 for its energy work, and Amory and Hunter Lovins were named "Heroes of the Planet" by Time magazine in 2000.

As we seek solutions for the vast array of energy and national security issues we are now confronting, we would do well to draw upon the ideas and approaches being explored, tested and implemented by the people at RMI. I look forward with anticipation to RMI's next twenty years and the exciting contributions and innovative ideas they will no doubt produce.

HONORING WILLIAM M. MAGUY

HON. GEORGE RADANOVICH

OF CALIFORNIA $\,$

IN THE HOUSE OF REPRESENTATIVES

Thursday. November 15, 2001

Mr. RADANOVICH. Mr. Speaker, I rise today to honor the memory of William M. Maguy for his faithful dedication to improving the lives of others. Mr. Maguy died in his home on February 17, 2001, of a massive heart attack.

William had an extensive education. He earned a BA and an MA in Philosophy from the Aquinas Institute of Philosophy, an MA in Theology from the Aquinas Institute of Theology, and he was a Ph.D. candidate in Education from the University of Chicago.

From 1961 to 1963 William served as a Professor of Theology, a Dean of Students, a Religious Education Instructor, and an Informal Liaison Officer of Catholic Church and International Organizations in Bolivia. From 1965–1966 he served as the Dean of Men at the Aquinas Institute in Illinois. In 1967 he began his service at Proteus, Inc, a company that focuses on improving people's ability to become